PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	10626420
Filing Date	2003-07-24
First Named Inventor	Sheueling Chang Shantz
Art Unit	2436
Examiner Name	Johnson, Carlton
Attorney Docket Number	6000-32301

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/CJ/	1	5347481			Lambert, et al.	
	2	6049815			Lambert, et al.	
	3	6199087			Blake, et al.	
	4	6763365			Chen, et al.	
	5	4863247			Lasher, et al.	
	6	6687725			Chen, et al.	
	7	7240084			Gura, et al.	
	8	7346159		2008-03-18	Gura, et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10626420
	Filing Date	2003-07-24
	First Named Inventor	Sheueling Chang Shantz
	Art Unit	2436
	Examiner Name	Johnson, Carlton
	Attorney Docket Number	6000-32301

/CJ/	9	7461115		2008-12-02	Eberle, et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/CJ/	1	20030123654			Lambert, et al.	
	2	20030123655			Lambert, et al.	
	3	20020044649			Gallant, et al.	
	4	20040158597			Ye, et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10626420
	Filing Date	2003-07-24
	First Named Inventor	Sheueling Chang Shantz
	Art Unit	2436
	Examiner Name	Johnson, Carlton
	Attorney Docket Number	6000-32301

/CJ/	1	U.S. Application Serial No. 11/625,659 filed 1/22/07.	☐
	2	U.S. Application Serial No. 10/789,311 filed 2/27/04.	☐
	3	U.S. Application Serial No. 12/256,295 filed 10/22/08.	☐
	4	U.S. Application Serial No. 10/387,007 filed 3/11/03.	☐
	5	U.S. Application Serial No. 10/996,103 filed 11/23/04.	☐
	6	ERDEM, et al., "A Less Recursive Variant of Karatsuba-Ofman Algorithm for Multiplying Operands of Size a Power of Two," Proceedings of the 16th IEEE Symposium on Computer Arithmetic (ARITH-16'03), June 15-18, 2003.	☐
	7	Gupta, V., et al, "Speeding up Secure Web Transactions Using Elliptic Curve Cryptography," Sun Microsystems, Inc., http://research.sun.com/projects/crypto/, 9 pages.	☐
	8	Comba, P.G., "Exponentiation Cryptosystems on the IBM PC," IBM Systems Journal, Vol. 29, No. 4, 1990, pp. 526-538.	☐
	9	Kaliski, Burt, "TWIRL and RSA Key Size," Technical Notes, May 1, 2003, RSA Laboratories, 5 pages, downloaded from Internet http://www.orsasecurity.com/rsalabs/node.asp?id=2004 as of September 13, 2006.	☐
	10	Gura, Nils, et al., "Comparing Elliptic Curve Cryptographic and RSA on 8-bit CPUs," Cryptographic Hardware and Embedded Systems – CHES 2004: 6th International Workshop (Cambridge, MA, USA), August 11-13, 2004, LNCS, Vol. 3156, ISBN 3-540-22666-4, pp. 119-132, Springer.	☐
	11	Karatsuba, A., et al., "Ymnozhenie mnogozhachnix chisel na avtomatax," Doklady Academi Nauk SSSR, Vo. 145. No. 2, pp. 293-294, 1962.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10626420
	Filing Date	2003-07-24
	First Named Inventor	Sheueling Chang Shantz
	Art Unit	2436
	Examiner Name	Johnson, Carlton
	Attorney Docket Number	6000-32301

/CJ/	12	Hankerson, et al., "Guide to Elliptic Curve Cryptography," pp. 48-53, 95-113, 129-147, 205-212 and 224-226, Springer-Verlag, 2004.	☐
	13	Cohn, Leonard Allen, "Generate-Propogate Adders," ChoPP Computer Corporation, prior 2000, pp. 1-16.	☐
	14	Mano, M. Morris, "Computer System Architecture," Prentice-Hall, Inc., 1976, pp. 244-249.	☐
	15	Guajardo, et al., "Efficient Algorithms for Elliptic Curve Cryptosystems," ECE Dept., Worcester Polytechnic Institute, pp. 1-16 (CRYPTO '97, Springer-Verlag, LNCS 1294, pp. 342-356, 1997).	☐
	16	Weimerskirch, et al., "Generalizations of the Karatsuba Algoirthm for Polynomial Multiplication," Communication Security Group, Dept. of Electrical Engineering & Information Sciences, Ruhr-Universitat, Germany, March 2002, pp. 1-23.	☐
	17	Blake-Wilson, S., "Additional ECC Groups for IKE", IPSec Blake-Wilson, Dierks, Hawk-Working Group, July 23, 2002, pp. 1-17.	☐
	18	Gupta, V., "ECC Cipher Suites for TLS," Blake-Wilson, Dierks, Hawk – TLS Working Group, August 2002, pp. 1-31.	☐
	19	"RFC 2246 on the TLS Protocol Version 1.0", http://www.ietf.org/mail-archive/ietf-announce/Current/msg02896.html, March 26, 2003, 2 pages, including Dierks, T., "The TLS Protocol Version 1.0", Dierks & Allen, January 1999, pp. 1-80.	☐
	20	Song, et al., "Low-Energy Digit-Serial/Parallel Finite Field Multipliers," Journal of VLSI Signal Processing 19, 1988, pp. 149-166.	☐
	21	Agnew, et al., "An Implementaion of Elliptic Curve Cryptosystems Over F2155," IEEE Journal on Selected Areas on Communications, Vol. 11. No. 5, June1993, pp. 804-813.	☐
	22	Halbutogullari, et al., "Mastrovito Multiplier for General Irreducible Polynomials," IEEE Transactions on Computers, Vo. 49, No. 5, May 2000, pp. 503-518.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10626420
	Filing Date	2003-07-24
	First Named Inventor	Sheueling Chang Shantz
	Art Unit	2436
	Examiner Name	Johnson, Carlton
	Attorney Docket Number	6000-32301

/CJ/	23	Yanik, et al., "Incomplete Reduction in Modular Arithmetic," IEEE Proc.-Comput. Digit. Tech., Vol. 149, No. 2, March 2002, pp. 46-52.	☐
	24	Blum, et al., "High-Radix Montgomery Modular Exponentiation on Reconfigurable Hardware," IEEE Transactions on Computers, Vol. 50, No. 7, July 2001, pp. 759-764.	☐
	25	Orlando, et al., August 2000, "A High-Performance Reconfigurable Elliptic Curve Processor for GF(2m)," CHES 2000 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1965, pp. 41-56.	☐
	26	Lopez, et al., August 1999, "Fast Multiplication on Elliptic Curves over GF(2m) without Precomputation," CHES 1999 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1717, pp. 316-327.	☐
	27	Hankerson, et al., August 2000, "Software Implementation of Elliptic Curve Cryptography over Binary Fields," CHES 2000 Workshop on Cryptographic Hardware and Embedded Systems, Springer-Verlag, Lecture Notes in Computer Science, 1965, pp. 1-24.	☐
	28	Koblitz, Neal, "Elliptic Curve Cryptosystems," Mathematics of Computation, Vo. 48, NO. 177, January 1987, pp. 203-209.	☐
	29	Schroeppel, et al., 1995, "Fast Key Exchange with Elliptic Curve Systems," Advances in Cryptography, Crypto '95, Springer-Verlag, Lecture Notes in Computer Science 963, pp. 43-56.	☐
	30	Gao, et al., "A Compact Fast Variable Key Size Elliptic Curve Cryptosystem Coprocessor," Proceedings of the Seventh Annual IEEE Symposium on Field-Programmable Custom Computer Machines, 1998.	☐
	31	Miller, V., "Use of Elliptic Curves of Cryptography," In Lecture Notes in Computer Science 218, Advances in Cryptology, CRYPTO '85, pp. 417-426, Springer-Verlag, Berling, 1986.	☐
	32	Itoh, et al., "A Fast Algorithm for Computer Multiplicative Inverses in GF(2m) Using Normal Bases," Informaiton and Computation, Vol. 78, NO. 3, 1988, pp. 171-177.	☐
	33	Bednara, et al., "Reconfigurable Implementation of Elliptic Curve Crypto Algorithms," Proceedings of the International Parallel and Distributed Processing Symposium, IEEE Computer Society, 2002, 8 pages.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10626420
	Filing Date	2003-07-24
	First Named Inventor	Sheueling Chang Shantz
	Art Unit	2436
	Examiner Name	Johnson, Carlton
	Attorney Docket Number	6000-32301

/CJ/	34	U.S. Dept. of Commerce/National Institute of Standards and Technology, "Digital Signature Standard (DSS)," Federal Information Processing Standards Publication, January 27, 2000, pp. 1-74.	☐
	35	Blake-Wilson, et al, "ECC Cipher Suites for TLS," Blake-Wilson, Dierks, Hawk—TLS Working Group, March 15, 2001, pp. 1-22.	☐
	36	Goodman, et al., "An Energy-Efficient Reconfigurable Public-Key Cryptography Processor," IEEE Journal of Solid-State Circuits, Vol. 36, No. 11, November 2001, pp. 1808-1820.	☐
	37	Ernst, et al., "Rapid Prototyping for Hardware Accelerated Elliptic Curve Public-Key Cryptosystems," 12th IEEE Workshop on Rapid System Prototyping, Monterey, CA June 2001, pp. 24-29.	☐
	38	Blake, et al., "Elliptic Curves in Cryptography," London Mathematical Society Lecture Note Series 265, Cambridge University Press, UK, 1999, pp. vii-204.	☐

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/Carlton Johnson/	Date Considered	06/17/2009

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.